

IN THE CLAIMS:

The text of all pending claims (including withdrawn claims) is set forth below. Cancelled and not entered claims are indicated with claim number and status only. The claims as listed below show added text with underlining and deleted text with ~~strikethrough~~. When strikethrough cannot easily be perceived, or when five or fewer characters are deleted, [[double brackets]] are used to show the deletion. The status of each claim is indicated with one of (original), (currently amended), (cancelled), (withdrawn), (new), (previously presented), or (not entered).

Please AMEND claims 1, 4, 5, 6, 10, 14, and 18 and CANCEL claim 3 without prejudice or disclaimer in accordance with the following:

1. (Currently amended) An apparatus to determine an area of an optical disc, comprising:

a pickup that reads/records a signal from/to the optical disc;
a spindle motor that revolves the optical disc; and

a controller that counts a number of absolute time-code in pre-groove (ATIP) syncs for one rotation of the optical disc at a current position of the pickup, compares the number of counted ATIP syncs with a reference number of ATIP syncs, and determines the current position of the pickup based on a comparison result, when ATIP sync information read by the pickup indicates that the pickup is present in an area of the optical disk that is greater than or equal to 95 minutes,

wherein the optical disc has an absolute time of 99 minutes, and

wherein the controller comprises:

a memory that stores a reference number of ATIP syncs for each track of the optical disc;

a counter that counts the number of ATIP syncs for each track at the current position of the pickup; and

a location determination unit that compares the number of counted ATIP syncs with the reference number of ATIP syncs and determines the current position of the pickup based on the comparison result.

2. (Original) The apparatus of claim 1, wherein an ATIP sync is output for a block of data that is a unit of measurement for data recording, and wherein one block corresponds to 2 Kbytes.

3. (Cancelled)

4. (Currently amended) The apparatus of claim-31, wherein the location determination unit determines that the pickup is present in a lead-in area when the number of counted ATIP syncs is less than the reference number of ATIP syncs.

5. (Currently amended) The apparatus of claim-31, wherein the location determination unit determines that the pickup is present in an area other than a lead-in area when the number of counted ATIP syncs is greater than the reference number of ATIP syncs.

6. (Currently amended) A method of determining an area of an optical disc, comprising:

counting a number of absolute time-code in pre-groove (ATIP) syncs for one rotation of the optical disc at a current position of a pickup when ATIP sync information recorded on the optical disc indicates that the pickup is currently present in an area of the optical disk that is greater than or equal to 95 minutes; and

determining the current position of the pickup by comparing the number of counted ATIP syncs with a reference number of ATIP syncs,

wherein the optical disc has an absolute time of 99 minutes,

storing, in a memory, the reference number of ATIP syncs for each track of the optical disc,

counting, by a counter, the number of ATIP syncs for each track at the current position of the pickup, and

comparing, by a location determination unit, the number of counted ATIP syncs with the reference number of ATIP syncs and determining the current position of the pickup based on the comparison result.

7. (Original) The method of claim 6, wherein an ATIP sync is output for a block of data which is a unit of measurement for data recording, and wherein one block corresponds to 2 Kbytes.

8. (Original) The method of claim 6, wherein during the determining of the current position of the pickup, the pickup is determined to be present in a lead-in area when the number of counted ATIP syncs is less than the reference number of ATIP syncs.

9. (Original) The method of claim 6, wherein during the determining of the current position of the pickup, the pickup is determined to be present in an area other than a lead-in area when the number of counted ATIP syncs is greater than the reference number of ATIP

syncs.

10. (Currently amended) A controller to determine a position of a pickup of an optical disc, comprising:

a memory that stores a reference number of an absolute time-code in pre-groove (ATIP) syncs for each track of the optical disc;

a counter, coupled to the memory, that counts a number of ATIP syncs for one rotation of the optical disk at a current location of the pickup to provide a counted number of ATIP syncs; and

a location determination unit, coupled to the counter and the memory, that compares the counted number of ATIP syncs with the reference number of ATIP syncs stored in the memory for each track and determines a current position of the pickup based on a comparison result,

wherein the optical disc has an absolute time of 99 minutes.

11. (Original) The controller of claim 10, wherein an ATIP sync is output for a block of data which is a unit of measurement for data recording, and wherein one block corresponds to 2 Kbytes.

12. (Original) The controller of claim 10, wherein during determining of the current position of the pickup, the pickup is determined to be present in a lead-in area when the counted number of ATIP syncs is less than the reference number of ATIP syncs.

13. (Original) The controller of claim 10, wherein during determining of the current position of the pickup, the pickup is determined to be present in an area other than a lead-in area when the counted number of ATIP syncs is greater than the reference number of ATIP syncs.

14. (Currently amended) A computer-readable medium having computer-executable instructions stored thereon to determine a position of a pickup of an optical disc, wherein the computer-executable instructions include:

storing a reference number of an absolute time-code in pre-groove (ATIP) syncs for each track of the optical disc;

counting a number of ATIP syncs for one rotation of the optical disk at a current location of a pickup to provide a counted number of ATIP syncs;

comparing the counted number of ATIP syncs with the reference number of ATIP syncs stored in the memory for each track to determine a comparison result; and

determining a current position of the pickup based on the comparison result,
wherein the optical disc has an absolute time of 99 minutes.

15. (Original) The computer-readable medium of claim 14, wherein an ATIP sync is output for a block of data which is a unit of measurement for data recording, and wherein one block corresponds to 2 Kbytes.

16. (Original) The computer-readable medium of claim 14, wherein during determining of the current position of the pickup, the pickup is determined to be present in a lead-in area when the counted number of ATIP syncs is less than the reference number of ATIP syncs.

17. (Original) The computer-readable medium of claim 14, wherein during determining of the current position of the pickup, the pickup is determined to be present in an area other than a lead-in area when the counted number of ATIP syncs is greater than the reference number of ATIP syncs.

18. (Currently amended) An apparatus to determine an area of an optical disc, comprising:

a pickup that reads/records a signal from/to the optical disc; and
a controller that counts a number of absolute time-code in pre-groove (ATIP) syncs for one rotation of the optical disc at a current position of the pickup, compares the number of counted ATIP syncs with a reference number of ATIP syncs, and determines the current position of the pickup based on a comparison result, when ATIP sync information read by the pickup indicates that the pickup is present in an area of the optical disk that is greater than or equal to 95 minutes,

wherein the optical disc has an absolute time of 99 minutes, and
wherein the controller comprises:

a memory that stores a reference number of ATIP syncs for each track of the optical disc;
a counter that counts the number of ATIP syncs for each track at the current position of the pickup; and
a location determination unit that compares the number of counted ATIP syncs with the reference number of ATIP syncs and determines the current position of the pickup based on the comparison result.